Applications of Spatial Data: Ecological Niche Modeling, 16-18 May 2018

All sessions are in Rooms 205 and 206, NIMBioS (Claxton Education Building)

Wednesday, 16 May

8:00 - 8:45	Breakfast, NIMBioS Breakroom (Room 104)
8:45 - 9:15	Introduction to NIMBioS and instructors (L. Gross, Director)
	Overview and goals of tutorial (M. Papeş)
9:15 - 9:45	Ecological niche modeling (Part I): basic concepts (T. Peterson)
9:45 - 10:15	Ecological niche modeling (Part II): basics of modeling methods (M. Papeş)
10:15 - 10:30	Break
10:30 - 11:15	Species' occurrence records: sources and challenges (T. Peterson)
11:15 - 12:00	Environmental data: sources and challenges (C. Walker)
12:00 - 1:30	Lunch, NIMBioS Breakroom (Room 104)
1:30 - 2:00	Ecological niche modeling (Part III): advanced details and best practices (X. Feng)
2:00 - 2:30	Review and discussion of topics covered
2:30 - 2:45	Break
2:45 - 3:45	Hands-on: formatting data (presence and environmental) in ArcGIS (M. Papeş)
3:45 - 4:45	Hands-on: formatting data (presence and environmental) in R (X. Feng)
5:00 - 6:00	Reception (Room 104)
	Dinner on your own

Thursday, 17 May

8:00 - 8:45	Breakfast, NIMBioS Breakroom (Room 104)
8:45 - 9:15	Review of ecological niche modeling algorithms (T. Peterson/M. Papeş)
9:15 - 9:45	Niche modeling in Maxent (GUI) (M. Papeş)
9:45 - 10:30	Practice – Maxent
10:30 - 10:45	Break
10:45 - 11:20	Practice continued; summary of practice exercise
11:20 - 11:50	Niche modeling in R (X. Feng)
11:50-12:00	Group picture
12:00 - 1:30	Lunch, NIMBioS Breakroom (Room 104)
1:30 - 2:30	Practice – Niche modeling in R

2:30 - 3:00 Break

3:00 - 5:00 Model selection in ENM using ku.enm R package (T. Peterson)

Dinner on your own

Friday, 18 May

8:00 - 8:45 Breakfast, NIMBioS Breakroom (Room 104)

8:45 - 9:15 Interpretation and exploration of overnight model calibration results (T. Peterson)

9:15 - 9:45 Postprocessing and uses of Maxent outputs (M. Papeş/C.Walker)

9:45 - 10:15 Shifting from time-averaged to time-specific models (T. Peterson)

10:15 - 10:45 Break

10:45 - 11:15 Frontiers in ecological niche modeling (X. Feng)

11:15 - 11:45 Measuring uncertainty; sources of variation in model outcomes (M. Papeş)

12:00 - 1:30 Lunch, NIMBioS Breakroom (Room 104); airport taxis